



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-0583; Product Identifier 2018-NM-019-AD; Amendment 39-19453; AD 2018-20-19]

RIN 2120-AA64

Airworthiness Directives; Airbus SAS Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are superseding Airworthiness Directive (AD) 2017-16-07, which applied to certain Airbus SAS Model A330-200, A330-200 Freighter, A330-300, A340-500, and A340-600 series airplanes; and Model A340-313 airplanes.

AD 2017-16-07 required inspection of the fuselage bulk cargo door frames at specific locations, and corrective action if necessary. This AD requires new inspections of certain attachment holes for residual surface treatment and cracking, and corrective action if necessary; and provides an optional terminating action for the inspections. This AD also revises the applicability to add certain airplanes and remove others. This AD was prompted by a determination that only airplanes having certain manufacturer serial numbers (MSNs) are affected by tartaric sulfuric anodizing (TSA)/chromic acid anodizing (CAA) surface treatment in the door fitting attachment holes, and that airplanes

having certain MSNs were excluded. This AD is intended to complete certain mandated programs intended to support the airplane reaching its limit of validity (LOV) of the engineering data that support the established structural maintenance program. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Airbus SAS, Airworthiness Office – EAL, Rond-Point Emile Dewoitine No: 2, 31700 Blagnac Cedex, France, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; email airworthiness.A330-A340@airbus.com; Internet <http://www.airbus.com>. You may view this referenced service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0583.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0583; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the regulatory evaluation, any comments

received, and other information. The address for Docket Operations (phone: 800-647-5527) is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Vladimir Ulyanov, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3229.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2017-16-07, Amendment 39-18984 (82 FR 41874, September 5, 2017) (“AD 2017-16-07”). AD 2017-16-07 applied certain Airbus Model A330-200, A330-200 Freighter, A330-300, A340-500, and A340-600 series airplanes; and Model A340-313 airplanes. The NPRM published in the Federal Register on July 6, 2018 (83 FR 31499). The NPRM was prompted by a determination that only airplanes having certain MSNs are affected by TSA/CAA surface treatment in the door fitting attachment holes, and that airplanes having certain MSNs were excluded. The NPRM was intended to complete certain mandated programs intended to support the airplane reaching its LOV of the engineering data that support the established structural maintenance program. The NPRM proposed to require new inspections of certain attachment holes for residual surface treatment and cracking, and corrective action if necessary; and to provide an optional terminating action for the inspections. The NPRM also proposed to revise the

applicability to add certain airplanes and remove others. We are issuing this AD to address fatigue cracks in the bulk cargo door frames, caused by TSA/CAA surface treatment in certain bulk cargo door frame holes. Cracks in the bulk cargo door frames can cause the in-flight loss of a bulk cargo door, damage to the airplane, and subsequent reduced control of the airplane.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2018-0005, dated January 10, 2018 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Airbus SAS Model A330-200, A330-200 Freighter, and A330-300 series airplanes, and Airbus SAS Model A340-200 and A340-300 series airplanes. The MCAI states:

In the frame of the certification of the A330 Extended Service Goal exercise, it was identified that Tartaric Sulfuric Anodising (TSA) or Chromic Acid Anodising (CAA) surface treatment is present in some frame holes, from aeroplane MSN [manufacturer serial number] 0400 and later MSN, following production process modification. On bulk cargo door frames (FR) 67 and FR 69 right hand (RH) side, the door fitting attachment holes have this TSA or CAA treatment, which leads to a detrimental effect on fatigue behaviour.

This condition, if not detected and corrected, could lead to cracks in the primary structure, possibly resulting in in-flight loss of a bulk cargo door, consequent decompression and potential damage to, and reduced control of, the aeroplane.

To initially address this potential unsafe condition, Airbus issued Alert Operators Transmission (AOT) A53L012-16 to provide instructions to inspect the fuselage bulk cargo door frames at specific locations. Consequently, EASA issued AD 2016-0102 [which corresponds to FAA AD

2017-16-07], requiring repetitive non-destructive test (rototest and high-frequency eddy-current (HFEC)) inspection or visual detailed (DET) inspections [to detect cracking] of the affected areas, and, depending on findings, accomplishment of a repair.

Since that [EASA] AD was issued, it was determined that only aeroplanes from MSN 0400 to MSN 1779 are affected by CAA or TSA surface treatment issue in the door fitting attachment holes. However, it was also determined that aeroplanes MSN 0001 to MSN 0399 are affected in the same attachment holes due to a fatigue issue, therefore, the same inspections must also be accomplished on these aeroplanes. In addition, based on inspection results and calculation, Airbus redefined inspection thresholds and intervals, depending on aeroplane type, model and utilisation. Airbus published SB A330-53-3278 and SB A340-53-4239 providing the inspection instructions at the specific locations with extended inspection thresholds and intervals. Airbus also determined that the actions should not be required for A340-500 and -600 models, as for these aeroplanes, the unsafe condition would only develop beyond the Design Service Goal of these aeroplanes. Finally, Airbus developed modification (mod) 206409 and published associated SB A330-53-3275 and SB A340-53-4238, as applicable, as optional terminating action.

For the reasons described above, this [EASA] AD retains the requirements of EASA AD 2016-0102, which is superseded, expands the Applicability and requires redefined repetitive inspections of the holes at the upper and lower door support fittings of FR 67 and FR 69 RH and the holes at door latch fitting of FR 69 RH. This [EASA] AD also introduces an optional modification, which constitutes terminating action for the repetitive inspections as required by this [EASA] AD.

The optional modification involves related investigative actions of eddy current rotating probe testing for cracks of the support fittings and the frame holes at frame (FR)

67 and FR 69. You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0583.

Comments

We gave the public the opportunity to participate in developing this final rule. We received no comments on the NPRM or on the determination of the cost to the public.

Conclusion

We reviewed the relevant data and determined that air safety and the public interest require adopting this final rule as proposed, except for minor editorial changes.

We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

Related Service Information under 1 CFR part 51

Airbus SAS has issued the following service information.

- Service Bulletin A330-53-3275, dated September 8, 2017.
- Service Bulletin A330-53-3278, dated August 22, 2017.
- Service Bulletin A340-53-4238, dated September 8, 2017.
- Service Bulletin A340-53-4239, dated September 5, 2017.

Airbus Service Bulletins A330-53-3278 and A340-53-4239 describe procedures for rototest, HFEC/ultrasonic and detailed inspections for residual surface treatment and cracking of the upper and lower right-hand fuselage bulk cargo door support fitting

attachment holes at FR 67 and FR 69 and the right-hand fuselage bulk cargo door latch fitting attachment holes at FR 69. Airbus Service Bulletins A330-53-3275 and A340-53-4238 describe procedures for a modification, which includes eddy current rotating probe testing for cracks of the support fittings and the frame holes at FR 67 and FR 69, and removal of TSA or CAA in the final holes of the bulk door frames FR 67 and FR 69. These documents are distinct since they apply to different airplane models. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

We estimate that this AD affects 102 airplanes of U.S. registry. We estimate the following costs to comply with this AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspections and modification	Up to 40 work-hours X \$85 per hour = \$3,400	\$5,100	Up to \$8,500	Up to \$867,000

We have received no definitive data that enables us to provide cost estimates for the on-condition actions specified in this AD.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator.

Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes and associated appliances to the Director of the System Oversight Division.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a "significant regulatory action" under Executive Order 12866;

2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);

3. Will not affect intrastate aviation in Alaska; and

4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing Airworthiness Directive (AD) 2017-16-07, Amendment 39-18984 (82 FR 41874, September 5, 2017), and adding the following new AD:

2018-20-19 Airbus SAS: Amendment 39-19453; Docket No. FAA-2018-0583; Product Identifier 2018-NM-019-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2017-16-07, Amendment 39-18984 (82 FR 41874, September 5, 2017) (“AD 2017-16-07”).

(c) Applicability

This AD applies to the following Airbus SAS airplanes, certificated in any category, manufacturer serial numbers (MSNs) 0001 to 1779 inclusive; except airplanes on which Airbus Service Bulletin A330-53-3275 or Airbus Service Bulletin A340-53-4238 has been embodied.

- (1) Model A330-201, -202, -203, -223, and -243 airplanes.
- (2) Model A330-223F and -243F airplanes.
- (3) Model A330-301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes.
- (4) Model A340-211, -212, and -213 airplanes.
- (5) Model A340-311, -312, and -313 airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 53, Fuselage.

(e) Reason

This AD is prompted by a determination that only airplanes having certain MSNs are affected by tartaric sulfuric anodizing (TSA)/chromic acid anodizing (CAA) surface treatment in the door fitting attachment holes, and that airplanes having certain MSNs were excluded from AD 2017-16-07. This AD is intended to complete certain mandated programs intended to support the airplane reaching its limit of validity (LOV) of the engineering data that support the established structural maintenance program. We are

issuing this AD to detect and correct fatigue cracks in the bulk cargo door frames, caused by TSA/CAA surface treatment in certain bulk cargo door frame holes. Cracks in the bulk cargo door frames can cause the in-flight loss of a bulk cargo door, damage to the airplane, and subsequent reduced control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Repetitive Inspections

Before exceeding the thresholds specified in table 1 to paragraph (g) of this AD, or within the applicable time specified in paragraph (g)(1) or (g)(2) of this AD, whichever is later: Do a rototest, high frequency eddy current (HFEC), ultrasonic, or detailed inspection, as applicable, for residual surface treatment and cracking of the upper and lower right-hand fuselage bulk cargo door support fitting attachment holes at FR 67 and FR 69 and the right-hand fuselage bulk cargo door latch fitting attachment holes at FR 69, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-53-3278, dated August 22, 2017; or Airbus Service Bulletin A340-53-4239, dated September 5, 2017; as applicable. Thereafter, depending on the areas and inspection methods as defined in table 2 to paragraph (g) of this AD, repeat the inspection at intervals not exceeding those specified in table 3 to paragraph (g) of this AD.

(1) For airplanes having MSN 0001 through 0399 inclusive: Within 200 flight cycles after the effective date of this AD.

(2) For airplanes having MSN 0400 through 1779 inclusive: Within 800 flight cycles after the effective date of this AD.

Table 1 to paragraph (g) of this AD – Initial Inspection

Affected Airplanes	MSN	Operation: Short-range (SR); Long-range (LR)*	Inspection Threshold (flight cycles [FC] or flight hours [FH], whichever occurs first, since airplane first flight)
A330 (except -200F), A340-200, and A340-300	0001 to 0399 inclusive	SR	27,100 FC or 83,900 FH
		LR	23,600 FC or 133,100 FH
A330 (except -200F), A340-200, and A340-300	0400 to 1779 inclusive	SR	16,000 FC or 49,500 FH
		LR	13,900 FC or 78,600 FH
A330-223F and -243F	All	SR or LR	11,300 FC or 34,000 FH

*Guidance for determining whether an airplane is operated in short-range or long-range operations can be found in Airbus Operator Information Telex 999.0086/11.

Table 2 to paragraph (g) of this AD – Areas and Inspection Methods

Action	Areas to be Inspected	Inspection Methods*
1	Any	Detailed
2	Upper and lower door support fitting holes	Rototest
	Latch fitting holes	HFEC
3	Upper door support fitting hole	HFEC and ultrasonic

*The inspection interval, as specified in table 3 to paragraph (g) of this AD, is based on the kind of inspection (action) applied to an area, along with the airplane model. Alternating between inspection methods is allowed, provided that the applicable inspection interval is based on the method used during the latest inspection.

Table 3 to paragraph (g) of this AD – Inspection Intervals

Action/ Area(s)	Affected Airplanes	Operation: Short-range (SR); Long-range (LR)*	Inspection Interval (FC or FH, whichever occurs first)
1	All	SR or LR	150 FC
2	A330 (except -200F), A340-200, and A340-300	SR	3,300 FC or 10,300 FH
		LR	2,900 FC or 16,400 FH
	A330-223F and -243F	SR or LR	2,700 FC or 8,300 FH
3	A330 (except -200F), A340-200, and A340-300	SR	1,700 FC or 6,100 FH
		LR	1,400 FC or 8,400 FH
	A330-223F and -243F	SR or LR	1,700 FC or 5,200 FH

*Guidance for determining whether an airplane is operated in short-range or long-range operations can be found in Airbus Operator Information Telex 999.0086/11.

(h) Corrective Action

If any discrepancy is found during any inspection required by paragraph (g) of this AD, before further flight, repair using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or the European Aviation Safety Agency (EASA); or Airbus SAS's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(i) Non-Terminating Action for Repairs

Accomplishment of a repair on an airplane, as required by paragraph (h) of this AD, does not constitute terminating action for the inspections required by paragraph (g) of this AD for that airplane, unless otherwise specified in repair instructions approved by the Manager, International Section, Transport Standards Branch, FAA; or EASA; or

Airbus SAS's EASA DOA. If approved by the DOA, the approval must include the DOA-authorized signature.

(j) Optional Terminating Action

Accomplishment of the modification, including applicable related investigative and corrective actions and removal of TSA or CAA in the final holes of the bulk door frames FR 67 and FR 69, as applicable, specified in, and in accordance with the AI of Airbus Service Bulletin A330-53-3275, dated September 8, 2017; or Airbus Service Bulletin A340-53-4238, dated September 8, 2017; as applicable; constitutes terminating action for the inspections required by paragraph (g) of this AD for that airplane, unless otherwise specified in the repair instructions approved by the Manager, International Section, Transport Standards Branch, FAA; or EASA; or Airbus SAS's EASA DOA. If approved by the DOA, the approval must include the DOA-authorized signature.

(k) Credit for Previous Actions

This paragraph provides credit for the actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Airbus Alert Operators Transmission (AOT) A53L012-16, dated May 30, 2016; or Rev 01, dated March 9, 2017.

(l) Other FAA AD Provisions

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Section, Transport Standards Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards

District Office, as appropriate. If sending information directly to the manager of the International Section, send it to the attention of the person identified in paragraph (m)(2) of this AD. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) *Contacting the Manufacturer:* As of the effective date of this AD, for any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or the EASA; or Airbus SAS's EASA DOA. If approved by the DOA, the approval must include the DOA-authorized signature.

(m) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2018-0005, dated January 10, 2018, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0583.

(2) For more information about this AD, contact Vladimir Ulyanov, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3229.

(3) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (n)(3) and (n)(4) of this AD.

(n) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Airbus Service Bulletin A330-53-3275, dated September 8, 2017.

(ii) Airbus Service Bulletin A330-53-3278, dated August 22, 2017.

(iii) Airbus Service Bulletin A340-53-4238, dated September 8, 2017.

(iv) Airbus Service Bulletin A340-53-4239, dated September 5, 2017.

(3) For service information identified in this AD, contact Airbus SAS, Airworthiness Office – EAL, Rond-Point Emile Dewoitine No: 2, 31700 Blagnac Cedex, France, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; email airworthiness.A330-A340@airbus.com; Internet <http://www.airbus.com>.

(4) You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:
<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Des Moines, Washington, on September 26, 2018.

John P. Piccola, Acting Director,
System Oversight Division,
Aircraft Certification Service.

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